

## PATENT COOPERATION TREATY

## PCT

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

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JUN 11 2001

LYON & LYON  
INT'L. PROSECUTION

Applicant's or agent's file reference 249/282WO	FOR FURTHER ACTION see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. PCT/US91/00926	International filing date (day/month/year) 12 JANUARY 2001	(Earliest) Priority Date (day/month/year) 24 JANUARY 2000
Applicant NANOGEN, INC.		

This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 4 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

**1. Basis of the report**

a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing:

☐ contained in the international application in written form.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

2. ☐ Certain claims were found unsearchable (See Box I).

3. ☐ Unity of invention is lacking (See Box II).

4. With regard to the title,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the abstract,

☒ the text is approved as submitted by the applicant. ✓

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the drawings to be published with the abstract is Figure No. \_\_\_\_\_

☐ as suggested by the applicant.

☐ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.

☒ None of the figures.

## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US01/00926

## A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : G01N 15/00

US CL : 422/68.1

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 422/50,68.1,69,82.01,82.05,82.06; 435/6,7.1,7.2; 436/501

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
Please See Extra Sheet.

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5,968,745 A (THORPE et al.) 19 October 1999, see especially Figure 1 and column 4, line 18, through column 14, line 44.	1-21
Y	US 5,972,692 A (HASHIMOTO et al.) 26 October 1999, see especially column 3, line 62, through column 14, line 12.	1-21
Y	US 5,605,662 A (HELLER et al.) 25 February 1997, see especially column 5, line 24, through column 7, line 67.	1-21
Y	US 5,723,345 A (YAMAUCHI et al.) 03 March 1998, see especially column 5, line 46, through column 10, line 65.	1-21
Y	US 5,965,452 A (KOVACS) 12 October 1999, see especially column 8, lines 30-65.	1-21

☒ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

* Special categories of cited documents:	*T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
*A* document defining the general state of the art which is not considered to be of particular relevance	*X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
*E* earlier document published on or after the international filing date	*Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
*L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	*Z* document member of the same patent family
*O* document referring to an oral disclosure, use, exhibition or other means	
*P* document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search

17 MAY 2001

Date of mailing of the international search report

08 JUN 2001

Name and mailing address of the ISA/US  
Commissioner of Patents and Trademarks  
Box PCT  
Washington, D.C. 20231

Facsimile No. (703) 305-3230

Authorized officer

ARDIN MARSCHEL

Telephone No. (703) 308-0196

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US01/00926

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5,632,957 A (HELLER et al.) 27 May 1997, see especially column 19, lines 15-42.	1-21
A	US 5,063,081 A (COZZETTE et al.) 05 November 1991, see especially Figures 3 and 8B and related discussion.	1-21
A	US 5,466,575 A (COZZETTE et al.) 14 November 1995, see especially Figures 3 and 8B and related discussion.	1-21

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### B. FIELDS SEARCHED

Electronic data bases consulted (Name of data base and where practicable terms used):

CAS, WEST, MEDLINE, EMBASE, BIOTECH ABS, WPI covering search terms: electrode, permeation, substrate, photoelectric, face, layer, light, source, assay, nucleic, acid, immunoassay, and transport